

REMARKS

Reconsideration of the rejection contained in the Office Action of June 23, 2003 is respectfully requested.

All Claims pending in the application, namely 17 to 30, stand rejected under indefiniteness, anticipatory and obviousness grounds.

In particular, Claims 26 - 29 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 17, 19 and 21-30 stand rejected under anticipatory and obviousness grounds, specifically, Claims 17, 19, 21, 26, and 29 are rejected under 35 U.S.C. §102(e) as anticipated by U.S. Pat. No. 6,550,909 to Ichinose, et al. Claims 22 - 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ichinose ('909) et al. in view of Shaw-Klein et al. (U.S. 6,147,139); and Claims 25 and 30 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ichinose et al. in view of Hirose et al. (U.S. 6,203,899).

Applicant's respectfully disagree.

Claim Rejections - 35 U.S.C. §112

Claims 26, 27 and 28 have been amended to provide proper antecedent basis for the term "polymeric particles" as defined in independent claim 17.

Claim 29 has been amended to recite a proper Markush group changing the term "groups" to "group".

No new matter is added by these amendments. Accordingly, Applicants believe the Examiner's indefiniteness rejections have been overcome and should be withdrawn.

Claim Rejections - 35 U.S.C. §102(e)**U.S. Patent No. 6,550,909 to Ichinose**

Claims 17, 19, 21, 26, and 29 are rejected under 35 U.S.C. §102(e) as anticipated by U.S. Pat. No. 6,550,909 to Ichinose, et al. Applicant's respectfully disagree.

It is axiomatic that "[f]or a prior art reference to anticipate in terms of 35 U.S.C. §102, every element of the claimed invention must be identically shown in a single

reference." *In re Bond*, 910 F.2d 831, 832, 15 USPQ 1566, 1567 (Fed. Cir. 1990).

Rejected independent Claim 17 recites "[a]n ink jet printing method comprising the steps of: 1) printing onto a receiving medium which comprises a substrate coated with at least one ink receiving layer and at least one upper protective layer which comprises polymeric particles having film forming temperatures between 60 and 140°C and a binder; and 2) heating the printed image to form a stable image-protecting coating; wherein said printed image is substantially retained *within* the upper protective layer." (emphasis added).

Thus, in the present invention, the pigment component of the ink is *absorbed into* and remains *substantially within* the upper protective layer. This is distinguishable from Ichinose, et al. wherein the pigment component of the ink retained *on the surface* of the upper level of the structure:

[w]hen an ink is impacted on the porous layer including polymer particles according to the present invention, a solvent in the ink passes through the pores 902 to be absorbed into the porous layer including polymer particles since the relationship between the pore diameter of the porous layer including polymer particles and the particle diameter of the pigment component in the ink is optimized. However, the pigment component 200 does not pass through the pores, but *is adsorbed and arranged in the vicinity of the surface* of the porous layer including polymer particles.

Ichinose, et al., col. 5, line 66 - col. 6 line 8 (emphasis added).

Since Ichinose et al. does not contain every element of the present invention as embodied in Claim 17, it is not anticipatory of Claim 17.

Claims 19, 21, 26, and 29, each depend directly from Claim 17, and contain each of the elements of Claim 17. Ichinose et al. therefore does not anticipate Claims 19, 21, 26, and 29.

Applicants respectfully request that the Examiner's anticipation rejection be withdrawn.

Claim Rejections - 35 U.S.C. §103(a)

Ichinose ('909) in view of U.S. Patent No. 6,147,139 to Shaw-Klein et al.

Claims 22 - 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ichinose ('909) et al. in view of Shaw-Klein et al. (U.S. 6,147,139). Applicant's respectfully disagree.

The Examiner states that the difference between Ichinose et al. and the present claimed invention is the requirement in the claims of using an inert sheet during lamination. In light of Applicants' remarks regarding the 35 U.S.C. §102(e) rejection above, incorporated herein by reference, it is clear that this statement is not complete, in that there is an additional difference, i.e., the Ichinose reference does not teach that the printed image is substantially retained within the upper protective layer. Applicant will address both differences below.

It is well settled that the mere fact that the prior art could be modified to form the invention would not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Laskowski*, 10 USPQ2d 1397, 1398 (Fed. Cir. 1989); *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

It is submitted that the cited art does not teach or suggest the desirability of modifying the ink jet printing method of Ichinose to use an inert sheet in lamination in order to produce a printed image with high gloss, and thereby arrive at the claimed invention.

Shaw-Klein et al. is directed to adding heat fusible particles to the ink (col. 3, lines 12-15). In Ichinose the polymeric particles are not in the ink, but, rather are in the upper layer that is part of an ink receiving medium. Unlike Ichinose, Shaw-Klein et al. does not use a specially coated receiving medium, and, in fact, teaches away from such use (See col. 2, lines 26-32). Shaw Klein et al. therefore does not provide the motivation to combine its disclosure with that of Ichinose, et al.

Additionally, although the Examiner did not combine Shaw-Klein et al. with Ichinose to arrive at the claimed invention where the image is substantially contained within the protective layer, Applicant will address this further difference. As discussed above, the pigment component of the ink which is applied to the ink receiving medium of Ichinose resides on or in proximity to the surface of the upper polymer particle containing layer. Ichinose, et al., col. 5, line 66 - col. 6 line 8. Shaw-Klein et al. is directed to an ink which contains heat fusible particles. Shaw-Klein et al. (col. 3, lines 12-15). There is no motivation in either reference to combine the disclosures to provide the present invention. In fact,

Ichinose, et al. teaches away from allowing the pigment particles to permeate the upper protective layer so that the image is contained within the protective layer. See Ichinose et al. col. 7 lines 42 - 53.

Thus, even if Shaw-Klein et al. were combined with Ichinose et al., the combination would not result in the methods of the present invention.

Accordingly, Applicants believe that these rejections have been overcome and should be withdrawn.

Claim Rejections - 35 U.S.C. §103(a)

Ichinose ('909) in view of U.S. Patent No. 6,203,899 to Hirose et al.

Claims 25 and 30 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ichinose et al. in view of Hirose et al. (U.S. 6,203,899). Applicant's respectfully disagree.

The Examiner states that the difference between Ichinose et al. and the present claimed invention is the requirement in the claims of a specific type of binder. In light of Applicants' remarks regarding the 35 U.S.C. §102(e) rejection above, incorporated herein by reference, it is clear that this statement is not complete, in that there is an additional difference, i.e., the Ichinose reference does not teach that the printed image is substantially retained within the upper protective layer. Applicant will address both differences below.

Ichinose et al. describes an upper layer containing polymer particles and optionally a binder. Hirose et al. discloses ultra fine cationic particles, optionally in combination with fine organic resin particles, in a surface layer. Hirose et al. col. 3, lines 52 - 54 and col. 4, lines 60 - 65. Suitable cationic particles are oxides of metals such as magnesium, calcium, aluminum, zinc, chromium, iron, copper, tin, lead and manganese. Hirose et al., col. 3 lines 62 - 67. Hirose also discloses a binder of water soluble resin such as polyvinyl alcohol. Hirose et al. col. 4 lines 40 - 46. There is therefore no motivation in the references to combine the binder of Hirose et al., which is used with ultra fine cationic particles with the method of Ichinose which uses polymer particles to achieve the present invention, which does not require cationic particles.

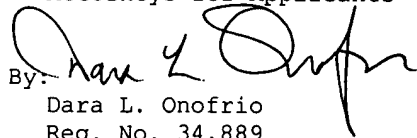
Additionally, although the Examiner did not combine Hirose et al. with Ichinose, et al. to arrive at the claimed invention where the image is substantially contained within the protective layer, Applicants will address this further difference. As discussed above, the pigment component of the ink which is applied to the ink receiving medium of Ichinose et al. resides on or in proximity to the surface of the upper polymer particle containing layer. Ichinose, et al., col. 5, line 66 - col. 6 line 8. As stated above, Hirose et al. discloses ultra fine cationic particles, optionally in combination with fine organic resin particles, in a surface layer. Thus, whether or not Hirose et al. discloses a method where the printed image is substantially contained within a protective layer, there is no motivation in either reference to combine the disclosures to provide the present invention. In fact, as argued above, Ichinose, et al. teaches away from allowing the pigment particles to permeate the upper protective layer so that the image is contained within the protective layer. See Ichinose et al. col. 7 lines 42 - 53.

Thus, even if Hirose et al. were combined with Ichinose et al., the combination would not result in the methods of the present invention.

Accordingly, Applicants believe that these rejections have been overcome and should be withdrawn.

Applicants submit that this application is now in condition for allowance. No new matter has been introduced by this Amendment. Reconsideration of this application and allowance of pending claims 17-30 are hereby requested. If a telephone interview would be useful to advance this case, then the Examiner is invited to telephone the undersigned.

Respectfully submitted,
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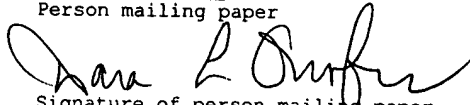
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